## IN THE CLAIMS

Please amend the claims as follows:

- 1. (CURRENTLY AMENDED) In a electrochemical cell, a cathode comprising:
- a cathode active material including a valency change material for storing and supplying oxygen via a change in the valency state of said valency change material.
  - 2. (CANCELED)
  - 3. (CANCELED)
- 4. (ORIGINAL) The cathode according to claim 1, wherein said valency change material is a nickel hydroxide/nickel oxyhydroxide redox couple.
- 5. (CURRENTLY AMENDED) The cathode according to claim 1, wherein said valency change redox material comprises a metal/metal oxide redox couple of an element selected from the group consisting of copper, silver, zinc and cadmium.
- 6. (CURRENTLY AMENDED) The cathode according to claim 1, wherein said valency change redox material comprises a metal oxide/oxide redox couple of a metal selected from tin or manganese.

- 7. (CURRENTLY AMENDED) The cathode according to claim 1, wherein said valency change redox material comprises a cobalt hydroxide/oxyhydroxide redox couple.
- 8. (ORIGINAL) The cathode of claim 1, further including a hydrophobic component.
- 9. (CURRENTLY AMENDED) The cathode of claim 8, wherein said hydrophobic component comprises polytetrafluoroethylene (PTFE).
- 10. (CURRENTLY AMENDED) The cathode of claim 9, wherein said PTFE polytetrafluoroethylene is at least one of:
  - a) intimately mixed with said cathode active material;
  - b) graded within said cathode active material; or
  - c) a separate layer within said cathode.
- 11. (ORIGINAL) The cathode of claim 1, further including a current collector extending within said active material.
- 12. (ORIGINAL) The cathode of claim 11 wherein said current collector comprises an electrically conductive mesh, grid, foam or expanded metal.
  - 13. (ORIGINAL) The cathode of claim 1, further including a

catalytic carbon component.

- 14. (CURRENTLY AMENDED) A cathode active material for a cathode comprising:
- a valency change material adapted to store and supply a cathode fuel for storing and supplying oxygen via a change in valency during use of said cathode.

## 15. (CANCELED)

- 16. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change redox material is a nickel hydroxide/nickel oxyhydroxide redox couple.
- 17. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change redox material comprises a metal/metal oxide redox couple of an element selected from the group consisting of copper, silver, zinc and cadmium.
- 18. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change redox material comprises a metal oxide/oxide redox couple of a metal selected from tin or manganese.

19. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change redox material comprises a cobalt hydroxide/oxyhydroxide redox couple.